



The National CORS Program

The National CORS (Continuously Operating Reference Station) program comprises a nationwide network of permanently operating Global Positioning System (GPS) receivers. NGS collects GPS data from this network and distributes the data via the Internet. The program's primary objective is to provide local GPS users with a link to the National Spatial Reference System (NSRS) for determining precise positions. The data also provides a way to monitor the three-dimensional stability of the sites' positions, which are determined to an accuracy of 1 to 3 centimeters.

CORS data significantly improves GPS positioning accuracy by using differential GPS (DGPS) techniques. DGPS compares the data obtained by a user's receiver with that from one or more receivers located at points of known position. Accuracies of a few millimeters to a few centimeters can be achieved by processing data from the National CORS sites.

NGS is developing the National CORS network to meet its goal of providing full nationwide access. In the next few years the network will grow from its present size of 176 sites (March 2000) to approximately 300 sites. This level of coverage provides for every location in the United States to be within 200 km of a National CORS site. NGS continually updates its Web site with new information on the National CORS network, and plans for this promising new GPS application.

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U.S. DEPARTMENT OF COMMERCE
 National Oceanic and Atmospheric Administration
 National Ocean Service
 National Geodetic Survey

The National Geodetic Survey (NGS) defines and manages the National Spatial Reference System, which determines position, height, distance, direction, gravity, and shoreline throughout the United States. Since 1807 NGS and its predecessor agencies have led the world in precise positioning and developed emerging technologies for the public. NGS provides its expertise and a wealth of free information, including direct access to its data base, on the World Wide Web at: www.ngs.noaa.gov



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